

ABSTRACT

There is provided means which is designed to smoothly supply mist to a rotary tool in rotation without involving a rotary shaft to which a rotary tool is attached so as to easily add the cooling/lubricating mechanism to an already installed machining device and to achieve free selection/use of a rotary tool from various commercially available rotary tools having an inside diameter not coincident with the outside diameter of the rotating shaft.

A mist supply mechanism for supplying mist under pressure to a rotary tool 18 provided at a rotating shaft 10, and implementing cooling and/or lubricating of the rotary tool 18 during workpiece-machining is configured so that the rotary tool 10 is provided at a sleeve 16 of a necessary length circumferentially engaging with the rotating shaft 10; a plurality of mist supply passages 38 extending in the axial direction are provided in the sleeve 16; and the mist is supplied to the rotary tool 18 through the mist supply passage 38.